

Bruhat Bangalore Mahanagara Palike
Modified Schedule B

WMP, RR Nagar

Name of Work:- Construction of Toilets Insides JP Park In Ward No 17

Estimate Amount: 50.00 Lakhs

Sl	Description of Item	Unit	Schedule B		
			Qty	Rate	Amount
			3	4	5
1	Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50 m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications Complete as per the direction of Engineer in Charge with all lead and Lift	Cum	8.83	173.00	1527.16
2	Earthwork excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m. after breaking of clods complete as per specifications Complete as per the direction of Engineer in Charge with all lead and Lift	Cum	299.50	329.00	98535.50
	Above 125 %	Cum	345.22	329.38	113708.67
3	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix M7.5 with OPC cement @ 180 kgs. with 40mm and down size graded granite metal coarse aggregates @ 0.85 cum and fine aggregates @ 0.575 cum machine mixed, concrete laid in layers not exceeding 15 cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specification.	Cum	34.50	5500.00	189750.00
	Above 125 %	Cum	7.82	6031.57	47154.84
4	Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878cum and fine aggregates @ 0.459cum, with superplasticiser @ 3lts conforming to IS9103-1999 Reaffirmed-2008, for all works in foundation plinth and ground floor level for roof slabs, staircase, lintles, retaining walls, return walls, walla (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parpets, coping, bed blocks, anchor, plain window cills, fillets etc., including cost of all materials, labour, plain machinery, curing complete as per specification. Complete as per the direction of Engineer in Charge with all lead and Lift.	Cum	7.62	6500.00	49524.02
5	Providing and removing centering, shuttering, strutting, propping etc., an removal of form work for sides & soffits of beams, beam hauncing cantilever girders, bressumers & lintels & not exceeding 1.0 in depth including cost of all materials, labour complete as per specifications.	Sqm	135.91	350.00	47569.90
6	Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 27.20 Kgs with 12mm & down sizes graded granite metal coarse aggregated @ 0.5865 cum & fine aggregates, @ 0.391 Cum with super super plasticiser @ 0.225 Ltrs machine mixed well compacted plain chajja 8.50 Cms avg thickness, up to ground floor level including removing centering, shuttering, strutting, propping etc., and removal of form work for cost of all materials, laobur HOM of machinery, curing complete as per specification.Ground floor	Sqm	8.13	485.00	3940.63
	Above 125 %	Sqm	5.27	539.53	2842.20
7	Providing and removing centering, shuttering, strutting, propping etc., for chajjas, corbels of all shapes & sizes, at all elevations & heights.Complete as per the direction of Engineer in Charge with all lead and Lift	Sqm	0.00	356.00	0.00

8	Providing TMT Steel reinforcement for RCC work including straightening, cutting, bending, hooking, placing wherever required, tying with binding members wherever necessary, complete as per design (laps, hooks and machineries etc., complete as per specifications. Specification No KHS 4.6.3.1 for TMT Bars Fe-500 Ground Floor Complete as per the direction of Engineer in Charge with all lead and Lift	Tonne	2.94	79000.00	224092.77
9	Providing & Constructing Granite/ trap/basalt size stone Masonry in basement with Cement mortar 1:8 edges of stone chiseled dressed in courses including cost of all materials, labour, curing complete as per specifications Complete as per the direction of Engineer in Charge with all lead and Lift	Cum	40.29	6200.00	249816.60
10	Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. In depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5m. Including cost of all labour complete as per specifications. Complete as per the direction of Engineer in Charge with all lead and Lift	Cum	119.88	220.00	26372.50
Above 125 %		Cum	476.13	221.42	105425.34
11	Providing and constructing Pre cast solid blocks with Compressive strength not less than 35 kg/ sqm with cement mortar 1:4 masonry (quilon, jamb, closer block) with solid concrete blocks of size 40 x 15 x 20 cms confirming to IS 2185/1965 in super structures including cost of materials, labour, charges, scaffolding, curing complete as per specifications. Complete as per the direction of Engineer in Charge with all lead and Lift.	Sqm	106.70	1000.00	106695.00
12	Providing & constructing non load bearing walls cement concrete solid blocks with compressive strength not less than 35 kg/sqm with cement mortar 1:4 (jamb, closer blocks) with blocks of size 40X10X20. (LXBXH) confirming to I.S. : 2185/1965 in super structure including cost of materials, labour charges, scaffolding, curing complete as per specification. Complete as per the direction of Engineer in Charge with all lead and Lift.	Sqm	37.88	950.00	35981.25
Above 125 %		Sqm	42.21	902.74	38104.71
13	Providing 18mm thick cement plaster in single coat with cement mortar 1:3 to Brick masonry including rounding off corners wherever required smooth rendering. Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. Complete as per the direction of Engineer in Charge with all lead and Lift	Sqm	204.86	310.00	63506.60
14	Providing 18mm thick cement plaster in single coat with cement mortar 1:4 to brick masonry including rounding off corners wherever required smooth rendering. Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.(internal). Complete as per the direction of Engineer in Charge with all lead and Lift	Sqm	399.90	288.00	115169.76
15	Providing 12mm thick cement plaster in single coat with cement mortar 1:3, to ceiling including rounding off corners wherever required smooth rendering. Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. GG. Complete as per the direction of Engineer in Charge with all lead and Lift. Complete as per the direction of Engineer in Charge with all lead and Lift	Sqm	180.07	298.00	53660.86
16	Providing INTEGRAL CRYSTALLINE Waterproofing treatment to the sunken portion of toilets. Using Crystalline Slurry of approved make @ 1.40 kg per SQM in two coats (0.7 Kg per coat) confirming to ASTM S 1202 & DIN V 18998 standards. Complete as per the direction of Engineer in Charge with all lead and Lift.	Sqm	188.84	500.00	94420.00

17	Providing and fixing of factory made 30 mm P.V.C door frame of size 5047 mm with a wall thickness of 5 mm made out of extruded 5 mm rigid PVC sheet metered cut at corners & joined 2 nos 150 mm long brackets of 15 x 15 mm MS Square tube, the entire door frame to be reinforced with 19 x 19 mm square tube of 19 gauge, the door frame to be fixed to the wall using MS directions of Engineer in Charge. Complete as per the direction of Engineer in Charge with all lead and Lift	Sqm	51.30	520.00	26676.00
18	Providing & fixing 30mm thick factory made rigid foam Panelled Door shutters made from M.S. tube of 19 gauge thickness, size 19 x 19mm for styles and 15 x 15mm for top and bottom rails, covered with heat moulded PVC channel of 5mm thick sheet & 30 x 50mm wide to form styles & 5mm thick & 75mm wide PVC Sheets for top rail, lock rail & bottom rail on either side & 5mm thick 20mm wide PVC sheet as gap insert for top rail & bottom rail. Panelling of 5mm thick PVC sheet fitted in the M.S. Frame. Sealed to the together with solvent cement adhesive etc.. Complete as per manufacturers 75 mm Aluminium hinges, GG. Complete as per the direction of Engineer in Charge with all lead and Lift	Sqm	14.18	2600.00	36855.00
19	Providing ceramic tiles of approved make, shade and size for flooring, treads of steps and landings laid on a bed of 12mm thick cement mortar 1:3 mix, materials, labour, curing, complete as per specifications, including cost of Complete as per the direction of Engineer in Charge with all lead and Lift	Sqm	209.63	1340.00	280904.20
20	Providing skirting, dado, rises of steps with colour glazed tiles on 10mm thick cement plaster 1:3 and jointed with white cement slurry over rough plaster surface (excluding cost of rough plastered surface which should be measured and paid separately) using glazed tiles of approved make and size as per the direction of Engineer in Charge with all lead and Lift	Sqm	100.63	1405.00	141378.13
Above 125 %		Sqm	255.85	1400.13	358224.18
21	Providing and applying two coats with oil bound washable distemper of approved brand and shade on wall surface including priming coat with distemper primer after thoroughly brooming the surface free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications. Complete as per the direction of Engineer in Charge with all lead and Lift	Sqm	399.90	120.00	47987.40
22	Water proof cement paint KSRB 15-16.1 : Providing and finishing external walls in two coats with waterproof cement paint with primer of approved brand and shade to give an even shade after thoroughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications. (P.No.124/15.53.2) --do with Primer-- GG. Complete as per the direction of Engineer in Charge with all lead and Lift	Sqm	204.86	112.00	22944.32
23	Providing and fixing white vitreous china clay, water closet Indian type (Squatting pan) of size 580mm with footrests, 100mm S or P trap, (approved make) cutting and making good the wall and floor wherever required, including cost of materials, labour complete as per specifications. Complete as per the direction of Engineer in Charge with all lead and Lift	Each	14.00	1466.00	20524.00
24	Providing and fixing white vitreous china clay, flat back, lipped front urinal basin of 430x260x350mm with 5 litres PVC automatic flushing cistern, C.I / M.S brackets, standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour complete as per specifications. Complete as per the direction of Engineer in Charge with all lead and Lift	Each	14.00	3200.00	44800.00
25	Providing & fixing CI Nahani trap of approved make conforming to ISI specification and construction of cistern in M 15 as per directions. Complete as per the direction of Engineer in Charge with all lead and Lift	Each	10.00	270.00	2700.00

26	Providing and fixing white vitreous china clay, flat back wash basin size 550x400mm with a single 15mm C.P. brass pillar tap with C.I / M.S brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour complete as per specifications. Complete as per the direction of Engineer in Charge with all lead and Lift	Nos	10.00	3328.00	33280.00
27	Providing and fixing to wall, ceiling and floor, Medium density polyethylene pipes 6.00 kgf /sqcm working pressure	Mtrs	20.00	359.00	7180.00
28	Providing and fixing to wall, ceiling and floor, Medium density polyethylene pipes 6.00 kgf /sqcm working pressure	Mtrs	45.00	327.18	14722.88
29	Providing and fixing to wall, ceiling and floor, Medium density polyethylene pipes 6.00 kgf /sqcm working pressure	Mtrs	35.00	419.00	14665.00
30	Providing and fixing to wall, ceiling and floor, Medium density polyethylene pipes 6.00 kgf /sqcm working pressure	Mtrs	27.00	359.12	9696.28
31	Providing and fixing to wall, ceiling and floor chlorinated poly vinyl chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all cpvc plain and brass threaded fittings including fixing the pipes with the clamp at 1.00mtr spacing. This includes joints complete (Internal works) (Concealed work including cutting chases and good the walls etc.) A) 15mm dia pipe nominal OD pipes Complete as per the direction of Engineer in Charge with all lead and Lift	Mtrs	25.00	496.00	12400.00
32	Providing and fixing to wall, ceiling and floor chlorinated poly vinyl chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all cpvc plain and brass threaded fittings including fixing the pipes with the clamp at 1.00mtr spacing. This includes joints complete (Internal works) (Concealed work including cutting chases and good the walls etc.) B) 20mm dia pipe nominal OD pipes Complete as per the direction of Engineer in Charge with all lead and Lift	Mtrs	47.00	418.61	19674.58
33	Providing and fixing to wall, ceiling and floor chlorinated poly vinyl chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all cpvc plain and brass threaded fittings including fixing the pipes with the clamp at 1.00mtr spacing. This includes joints complete (Internal works) (Concealed work including cutting chases and good the walls etc.) B) 20mm dia pipe nominal OD pipes Complete as per the direction of Engineer in Charge with all lead and Lift	Mtrs	75.00	226.93	17019.72
34	Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) NB including cost of all materials, labour and HOM of KBS 13.2.6/ a) of 20mm dia. Complete as per the direction of Engineer in Charge with all lead and Lift	Nos	15.00	360.00	5400.00
35	Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) NB including cost of all materials, labour and HOM of KBS 13.2.6/ b) of 25mm dia. Complete as per the direction of Engineer in Charge with all lead and Lift	Nos	13.00	370.14	4811.79
36	Supplying water storage tanks made of virgin polymer (LLDPE) with two layers outer Black or Blue and inner White layer of approved quality and make, conforming to I.S.I./ISO/SSI specifications. Complete as per the direction of Engineer in Charge with all lead and Lift	Nos	10.00	494.62	4946.18
37	Providing and fixing to wall, ceiling and floor chlorinated poly vinyl chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all cpvc plain and brass threaded fittings including fixing the pipes with the clamp at 1.00mtr spacing. This includes joints complete (Internal works) (Concealed work including cutting chases and good the walls etc.) B) 20mm dia pipe nominal OD pipes Complete as per the direction of Engineer in Charge with all lead and Lift	Nos	1000.00	5.00	5000.00
38	Providing and fixing to wall, ceiling and floor chlorinated poly vinyl chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all cpvc plain and brass threaded fittings including fixing the pipes with the clamp at 1.00mtr spacing. This includes joints complete (Internal works) (Concealed work including cutting chases and good the walls etc.) B) 20mm dia pipe nominal OD pipes Complete as per the direction of Engineer in Charge with all lead and Lift	Nos	4000.00	5.60	22384.51
39	Providing and fixing to wall, ceiling and floor chlorinated poly vinyl chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all cpvc plain and brass threaded fittings including fixing the pipes with the clamp at 1.00mtr spacing. This includes joints complete (Internal works) (Concealed work including cutting chases and good the walls etc.) B) 20mm dia pipe nominal OD pipes Complete as per the direction of Engineer in Charge with all lead and Lift	mtrs	100.00	197.00	19700.00
40	Providing and fixing to wall, ceiling and floor chlorinated poly vinyl chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all cpvc plain and brass threaded fittings including fixing the pipes with the clamp at 1.00mtr spacing. This includes joints complete (Internal works) (Concealed work including cutting chases and good the walls etc.) B) 20mm dia pipe nominal OD pipes Complete as per the direction of Engineer in Charge with all lead and Lift	mtrs	398.00	160.83	64011.77
41	Providing stone ware gully trap of approved quality and fixing in C C 1:2:4 and plastering with C M 1:3 where ever necessary (Rate including cost of all materials, fixtures and lead). Size: 15 cm x 10 cm. Complete as per the direction of Engineer in Charge with all lead and Lift	Each	10.00	209.00	2090.00
42	Providing stone ware gully trap of approved quality and fixing in C C 1:2:4 and plastering with C M 1:3 where ever necessary (Rate including cost of all materials, fixtures and lead). Size: 15 cm x 10 cm. Complete as per the direction of Engineer in Charge with all lead and Lift	Each	10.00	209.30	2093.04
43	Above 125 %				

27	Constructing brick masonry inspection chamber 450x450mm, and 450mm depth (clear inside dimension) for single pipeline, using table moulded non-modular bricks of class designation 50 in cement mortar 1:5, C.I. cover with frame to be not less than 40 kg (weight of cover 23kg and weight of granite metal inside plastering 12mm thick with cement mortar 1:3, finish smooth with a floating coat of cement on walls and bed concrete complete as per specifications. Complete as per the direction of Engineer in Charge with all lead and lift	Nos	8.00	8568.85	68550.80
EIRL-1	Providing and fixing self-supported, ribbed, high quality, high grade (D.350) MPAYst Min 1, pre-painted Galvalume steel roof sheet, coated with bare process, of total coated thickness as specified for different spans with a tolerance of +/- 0.02 mm, according to technical specifications confirming to A test. The roof should be fastened to the gutterbeam, on the external sloping side, at an interval of 51mm Centre to Centre, to a depth of 65 mm with GI anchor bolts and neoprenewashers & subjecting the gutter beam to Schmidt, Hammer test to ensure the anchorage of the anchor bolts. The self-supported roofing system should be designed to stand the wind load (As per IS 875 part-3) & Earthquake load (as per IS 1893) & the design should also comply with any other technical requirements such as turbo ventilators of 0.60 mts. dia and skylights of size 4.26 x 0.60 mts. fixed one in each row @ 10.00 Mtr C/C along the length & hangers for electrical fixtures as per the requirements including cost of all materials & labour for erection, all lead and lift, loading and unloading, HOM of machinery etc. complete as per approved drawing & design with prefabricated steel applications using quality material and are durable, reliable and corrosion and abrasion resistant. Welding shall confirm to latest structural welding code. Quality shall be on various parameters like shape, size, design gauge and polish. The entire trusses is anchored in RCC column by using 4 nos of M.S. anchor bolts at each support with 10mm thick base plate and shoe plate. The work includes cutting, straightening, placing in position and shoe plate, welding wherever necessary and applying one coat of red oxide primer coat to all the members including cost of all materials, labour charges, and hire charges of machinery for cutting, welding, grinding and erection equipments, with all lead and lift, transportation, etc., complete as per specification	Sqm	73.98	1718.50	127130.94
EIRL-2	Fabrication supplying and erecting M.S. tubular trusses of all spans as Kgs per approved drawing & design with prefabricated steel applications using quality material and are durable, reliable and corrosion and abrasion resistant. Welding shall confirm to latest structural welding code. Quality shall be on various parameters like shape, size, design gauge and polish. The entire trusses is anchored in RCC column by using 4 nos of M.S. anchor bolts at each support with 10mm thick base plate and shoe plate. The work includes cutting, straightening, placing in position and shoe plate, welding wherever necessary and applying one coat of red oxide primer coat to all the members including cost of all materials, labour charges, and hire charges of machinery for cutting, welding, grinding and erection equipments, with all lead and lift, transportation, etc., complete as per specification	Sqm	4438.65	122.28	542747.47
EIRL-3	KSRB 7.1 : Providing and fixing in position collapsible steel shutters with single or double leaf with vertical channel 20mmx10mmx2mmn braced with flat iron diagonals 20mmx5mm size, with top and bottom rails of T iron sections of 40x40x6 mm with 38mm dia steel pulleys complete with bolt and nuts, locking arrangements, stoppers, handles on both sides with 7.5cms openings at 10 cms. c to c applying a priming coat of red lead paint, cost of materials, labour, HOM complete as per specifications, size of gate 2.4mx1.4m Specification No. K.BS 7.7 / 7.12	Sqm	13.86	5739.34	79547.20
EIRL-4	Providing and fixing M.S. Hand railing for Balcony/Staircase etc, Sqm with 50mm dia. M.S. hollow pipe of 14 gauge, welded to 20mmx20mm M.S. square rod placed vertically, spaced at 100mm at regular intervals of 600mm. These vertical rods laterally tied to 3 horizontal rods spaced at equal interval. This assembly is fixed to concrete by using expansion bolts and welding the same to reinforcement bars and making good the surface. All the joints and sections should be cut to length, welded and grinded wherever necessary etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, etc., complete as per specification and drawing.	Sqm	54.84	3128.54	171569.35
EIRL-5	Supplying and fixing new Mangalore tiles on existing reepers including cost of materials, labour, HOM complete as per specifications.	Sqm	131.50	448.35	58958.18

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Part - 6	Providing and fixing M.S. Grill over existing compound wall as per using 16mm x 16mm M.S. Square rod at 150mm c/c spacing and 6mm x 40mm M.S. flats at horizontal and 6mm x 12mm M.S. flat for ornamental design and providing shop edge design at the vertex of every vertical rods including welding, grinding wherever necessary. All the steel surface including thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc. complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, etc., complete as per specification.	Sqm	44.80	5914.49	264969.17
Part - 7	Providing and fixing M.S. Gate as per Chief Architect Drawing, ornamental shape as shown in the drawing and 35mm x 6mm and 16 x 16mm Square rods for verticals alternatively spaced at 4cms c/c and 40mm x 6mm M.S. flats for horizontal member and at the top cast iron spikes are provided at alternate vertical members and at the top cast iron spikes complete. All the steel surface should be thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, with lead and lift, loading and unloading charges, etc., complete as per specification.	Sqm	6.93	3318.02	22993.87
Total Cost					4286954.06

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Asst. Executive Engineer
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H. H. H.
EXECUTIVE ENGINEER
RR Nagar Division

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